Attorney Docket No.: 56162.000514

## **CLAIMS**

1. A method for output power dithering for improved transmitter performance, the method comprising:

transmitting a plurality of packets at a first output power;

determining a first error rate associated with the transmission of the plurality of packets at the first output power;

transmitting the plurality of packets at at least one second output power different from the first output power;

determining at least one second error rate associated with the transmission at the at least one second output power; and

identifying a desired output power based at least in part on a comparison between the first error rate and the at least one second error rate.

2. A method for output power dithering for improved transmitter performance, the method comprising:

transmitting a plurality of packets at a first output power;

determining a first error rate associated with the transmission of the plurality of packets at the first output power;

transmitting the plurality of packets at a second output power if the first error rate is greater than a predetermined error rate value, wherein the second output power is different from the first output power;

determining a second error rate associated with the transmission at the second output power; and

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adjusting the second output power if the second error rate is lower than the first error rate.

- 3. The method according to claim 2, where the second output power is adjusted until a desired value of the second error rate is reached.
- 4. The method according to claim 2 further comprising:

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transmitting the plurality of packets at a third output power if the second error rate is not lower than the first error rate, wherein the third output power is different from the first output power and the second output power;

- determining a third error rate associated with the transmission at the third output power; and
  - adjusting the third output power if the third error rate is lower than the first error rate.
- 5. The method according to claim 4 further comprising transmitting the plurality of packets at the first output power if the third error rate is not lower than the first error rate.
  - 6. The method according to claim 2 further comprising resuming transmission of the plurality of packets at the first output power if the first error rate or the second error rate is not determined based on a predetermined criterion.
  - 7. The method according to claim 2, where the first error rate and the second error rate are determined based on a number of failed acknowledgements of transmitted packets.

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- 8. The method according to claim 2, wherein the transmission at the first output power and second output power is associated with a variable data rate.
- 9. The method according to claim 8, wherein the first error rate, the second error rate and the predetermined error rate value are associated with the variable data rate.
- 10. A system for output power dithering for improved transmitter performance, the system comprising:

a transmitter that transmits a plurality of packets at a first output power; and a processor that

determines a first error rate associated with the transmission of the plurality of packets at the first output power;

causes the transmitter to transmit the plurality of packets at at least one second output power;

determines at least one second error rate associated with the transmission at the at least one second output power; and

identifies a desired output power based at least in part on a comparison between the first error rate and the at least one second error rate.

20 11. A system for output power dithering for improved transmitter performance, the system comprising:

means for transmitting a plurality of packets at a first output power;
means for determining a first error rate associated with the transmission of the plurality of

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packets at the first output power;

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means for transmitting the plurality of packets at at least one second output power different from the first output power;

means for determining at least one second error rate associated with the transmission at

the at least one second output power; and

means for identifying a desired output power based at least in part on a comparison between the first error rate and the at least one second error rate.

12. A computer readable medium having code for causing a processor to perform output power dithering for improved transmitter performance, the computer readable medium comprising:

code adapted to transmit a plurality of packets at a first output power;

code adapted to determine a first error rate associated with the transmission of the plurality of packets at the first output power;

code adapted to transmit the plurality of packets at at least one second output power different from the first output power;

code adapted to determine at least one second error rate associated with the transmission at the at least one second output power; and

code adapted to identify a desired output power based at least in part on a comparison

between the first error rate and the at least one second error rate.